UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

MAR 1 8 2014

Superintendent
Attn: Dyke Marsh Wetland Restoration Plan/EIS
George Washington Memorial Parkway
700 George Washington Memorial parkway
Turkey Run Park Headquarters
McLean, Virginia 22101

Re: George Washington Memorial Parkway Draft Dyke Marsh Wetland Restoration and Long-term Management Plan/Environmental Impact Statement, Fairfax County, Virginia January 2014, CEQ 20140006

Dear Superintendent:

In accordance with the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the United States Environmental Protection Agency (EPA) has reviewed the subject document. The purpose of the Draft Environmental Impact Statement (DEIS) is to develop and implement actions for restoration and long-term management of the freshwater tidal marsh and other associated wetland habitats that have been lost or impacted in the Dyke Marsh on the Potomac River in Virginia. These actions are needed to protect the existing wetland from erosion, nonnative invasive plant species, loss of habitat, and altered hydrologic regimes; restore wetlands and ecosystem functions and processes lost through sand and gravel mining and shoreline erosion; avoid increased costs (delayed restoration will result in increased restoration costs); and improve ecosystem services that benefit the Potomac River Watershed and Chesapeake Bay.

Dyke Marsh is one of the largest remaining tidal freshwater wetlands in the Washington, D.C. metropolitan area. However, impacts from dredging and other past activities in or near the marsh caused changes and existing conditions continue to reduce its size. The original extent of the property covered approximately 650 acres. In 1937, the main part of the marsh north of the promontory covered approximately 184 acres, with an additional 16.5 acres south of the promontory, and another 15-20 acre parcel west of the parkway. The current extent of the marsh is about 60 acres plus the 15-20 acres west of the Parkway. Dyke Marsh includes tidal freshwater marsh, floodplain forest, and swamp forest.

Alternatives evaluated in the DEIS include the Alternative A: No Action; Alternative B: Hydrologic Restoration and Minimal Wetland Restoration (creates approximately 70 acres of

wetlands); and Alternative C: Hydrologic Restoration and Fullest Possible Extent of Wetland Restoration (creates approximately 245 acres of wetlands). Both action alternatives include creation of a breakwater structure in the general historic location of the promontory at the south end of the marsh that provided protection from waves during strong storms, and filling the deep channels within the park boundary. Other common elements include the approaches to construction of containment cells, achievement of natural edges on the outer perimeter of restored marsh area, creation of breaks in the Haul Road to hydrologically reconnect the former bottomland swamp forest with tidal flows, and approach to vegetation reestablishment. The preferred alternative is Alternative C.

Based on our review we rate this DEIS, Lack of Objections (LO). A description of our rating system can be found at http://www.epa.gov/compliance/nepa/comments/ratings.html. We suggest that additional information be provided describing the project as it relates to climate change and adaptive management. Please see our comments attached to this letter. Thank you for the opportunity to offer these comments. If you have any questions, please contact Barbara Okorn at (215)814-3330.

Sincerely,

Barbara Rudnick
NEPA Team Leader
Office of Environmental Programs

Enclosure

Draft Dyke Marsh Wetland Restoration and Long-term Management Plan/Environmental Impact Statement Detailed Comments

General

1) Page 105 describes the duration and type of impact. "Short-term impacts" are described as impacts associated with construction actions that are temporary and would not have long-lasting effects, but could last for several years. It should be noted that impacts that last for multiple years are not short term or temporary.
2) Some characteristics of material suitable for cell construction are mentioned. However, specifications should be developed after careful consideration. Sources of suitable material should be identified in advance to minimize potential adverse impacts and delays during construction.
3) Flooding is first identified as issue on Page 16 and then raised again in later chapters. The document notes that marsh restoration may help attenuate flooding in the immediate area. During past storm events communities, e.g., Belle View and New Alexandria, experienced severe flooding. It would be informative to identify neighborhoods at risk and determine to what extent the restoration may affect their resiliency.
Discuss how future changes (e.g., additional hardening, urban development, and increased stormwater runoff) in Hunting Creek and Cameron Run watersheds could affect marsh restoration.

Alternatives

4) Additional details should be provided for the build alternatives. For example, the number of breaches proposed for the Haul Road ranges from 2-12. This could result in the potential for release of sediment during construction and storm events. While we understand that BMPs will be followed, explanation of activities should be expanded.
5) Additional information should be provided describing the schedule for the action alternatives, including the condition of the project area after each phase. For example, will equipment be left in place until there is adequate available fill for placement in the next cell or will each phase be a "stand alone" event and stable? The timeframes for each portion of the build alternatives should also be discussed in greater detail.
6) Additional information should be provided describing how restoration efforts, including construction of cells, channel fill, breakwater, and breaks in Haul Road could be impacted by storm events during the construction period. This should also include how equipment and materials will be handled during storm events to prevent releases to the environment. Any necessary remedial actions should also be discussed.
7) Additional information should be provided about the reference marsh in Piscataway Park and why it is appropriate to use for this project. In addition, we encourage the project team to work with EPA and other agencies as the project moves forward.

8) The EIS should describe how climate change and sea level rise were considered in the design of the action alternatives. This should consider effects including shoreline erosion, changes in salinity, inundation and increased water depth in the restored marsh, magnification of erosion and sedimentation at breaches, elevation of the Haul Road, bridge and culvert designs.
9) Figure 2-8 Dismissed Alternative C was referenced with respect to cell construction sequence and location, but it differs significantly from Figure 2-9 Conceptual Alternative C. For clarity one revised drawing should be provided.
10) A comprehensive approach to anticipating conditions encountered during construction and implementing appropriate, effective controls to minimize adverse impacts should be included.
11) The project managers should consider the type of bottom material at the site now and the consequences of placing different grain size material in the future. The DEIS states that material will be placed at the site when available, but considerations need to be made regarding what organisms utilize that area and how they would be affected by the placement of material that is different in grain size. Actions should also be considered regarding the containment of this material and the surrounding biota to ensure any migration of this material will not have deleterious effects on the biota upstream or downstream of this area.

Resources

12) An inventory and map of submerged aquatic vegetation should be included in the EIS. It is also unclear if there are native SAVs and if they will be impacted by the project.
13) We encourage the project team to coordinate with the appropriate state and federal agencies regarding threatend and endangered species and species of concern concern annually to account for any changes in listings during the timeframe of the project.
14) Marsh restoration activities may impact existing wetlands and other waters of the United States (WOUS). A delineation identifies WOUS on the proposed project site and helps inform design and construction activities. Impacts to existing jurisdictional aquatic resources should be avoided and minimized to the maximum extent practicable. Compensatory mitigation for unavoidable impacts should be compliant with the 2008 Final Compensatory Mitigation Rule.
15) Additional discussion should be included to highlight how this project addresses the goals for restoring the Chesapeake Bay.
16) Wetlands, mudflats, and vegetated shallows (SAV) are special aquatic sites under 404(b)(1) guidelines. These and other jurisdictional aquatic resources should be identified, mapped and avoided to the maximum extent practicable. Potential impacts on the physical, chemical, and biological characteristics of the aquatic ecosystem should be fully evaluated. Of particular concern is suspended particulates/turbidity from proposed activities, e.g., cell construction, and dissimilarities between substrate and fill material.